THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in this application.

- 1. (Currently Amended) A bidirectional promoter comprising:
 - a) a Transcription Activation Module comprising a chemically synthesized synthesized and strategically designed artificial nucleotide sequence having the sequence shown in SEQ ID NO:1 SEQ ID NO. 1 or up to 70% homologous to it, and designed to enhance the level of expression of genes in plants; and
 - e) b) a Transcription Initiation Module comprising of a chemically synthesised synthesized and strategically designed artificial nucleotide sequence shown in SEQ ID NO:2 SEQ ID NO. 2 or up to 70% homologous to it, and designed to function as a minimal sequence to initiate transcription of a gene placed downstream; wherein a Transcription Initiation Module is placed on a first side and a second side of the Transcription Activation Module.
- 2. (Cancel)
- 3. (Cancel)
- 4. (Cancel)
- 5. (Previously Presented) A bidirectional promoter as claimed in claim 10 wherein one or more genes of interest are placed downstream of the Transcription Activation Module for

the purpose of their expression from one or both sides of the Transcription Activation Module.

- 6. (Currently amended) A bidirectional promoter as claimed in claim 1 wherein said Transcription Activation Module comprises a DNA sequence having <u>SEQ ID NO:1</u> SEQ ID NO:1 SEQ ID NO:1 of signature sequences statistically identified as commonly present in highly expressed plant genes within 100 to 500 nucleotide positions upstream of the transcription initiation site in plants.
- 7. (Currently amended) A bidirectional promoter as claimed in claim 1 wherein Transcription Initiation Module comprises a DNA sequence having <u>SEQ ID NO:2</u> SEQ ID NO:2 SEQ ID NO:2 Of signature sequences statistically identified as present within 100 nucleotides upstream of the transcription initiation site in natural promoters in plants.
- 8. (Previously Presented) A transgenic plant developed after stable transformation with the bidirectional promoter claimed in claim 1 for the purpose of improving plant characteristics of interest to agriculture or industry.
- 9. (Currently amended) A plant transformation vector comprising a bidirectional promoter as claimed in claim 1 expressing a selection marker such as *nptH*, *bar*, *hpt* etc. or any other such gene from one direction and a reporter gene such as *gusA*, *gfp*, *luc* or any other gene whose product can be conveniently monitored and the use of such vectors for development of a transgenic plant.
- 10. (Currently Amended) A bidirectional promoter comprising:

- a Transcription Activation Module comprising of a chemically synthesised synthesized and strategically designed artificial nucleotide sequence having the sequence shown in <u>SEQ ID NO:1</u> SEQ ID NO. 1 or up to 70% homologous to it, and designed to enhance the level of expression of genes in plants;
- d) b) a Transcription Initiation Module comprising of a chemically synthesised synthesized and strategically designed artificial nucleotide sequence shown in SEQ ID NO:2 SEQ ID NO. 2 or up to 70% homologous to it, and designed to function as a minimal sequence to initiate transcription of a gene placed downstream;
- c) said a Transcription Initiation Module being located on either or both sides a first side and a second side of the [1] Transcription Activation Module [1] to express one or two genes, one at a time or both simultaneously, for developing a genetically engineered plants plant.
- 11. (New) The vector according to claim 9 wherein the selection marker is selected from the group consisting of *nptII*, *bar*, and *hpt*.
- 12. (New). The vector according to claim 9 wherein the reporter gene is selected from the group consisting of gusA, gfp, and luc.
- 13. (New) A transgenic plant transformed by the plant transformation vector of claim 9.
- 14. (New) A transgenic plant transformed by the plant transformation vector of claim 11.

15. (New) A transgenic plant	transformed by th	e plant transformat	ion vector of clai	m 12